## We claim:

1. Aromatic-based silyl monomers having a structure represented by

$$R - X - Si - R_1$$

$$R_1$$

wherein R is a polymerizable group; X is selected from the group consisting of  $C_{1-10}$  alkyl,  $C_{1-10}$  alkyloxy,  $C_{6-36}$  aryl and  $C_{6-36}$  aryloxy; and the  $R_1$  groups may be the same or different selected from the group consisting of  $C_{1-10}$  alkyl,  $C_{1-20}$  cycloalkyl,  $C_{6-36}$  aryl,  $C_{6-36}$  aryl ether,  $C_{6-36}$  heterocycle,  $C_{6-36}$  heterocycle with one or more substituents,  $C_{1-10}$  alkyl ether and  $C_{6-36}$  aryloxy.

- A polymeric composition produced through the polymerization of one or more monomers of claim 1.
- A polymeric composition produced through the copolymerization of one or more monomers of claim 1 with one or more aromatic or non-aromatic non-siloxy-based monomers.

- A polymeric composition produced through the copolymerization of one or more monomers of claim 1 with one or more hydrophilic monomers.
- A polymeric composition produced through the copolymerization of one or more monomers of claim 1 with one or more hydrophobic monomers.
- 6. A method of producing the aromatic-based silyl monomers of claim 1 comprising:

combining an aromatic alkylsilane with a catalyst to form a product; and combining said product with acetic acid followed by an addition of acryloyl chloride.

7. A method of producing the polymeric compositions of claim 3

wherein said one or more aromatic or non-aromatic non-siloxy-based monomers is selected from the group consisting of 2-phenyoxyethyl methacrylate, 3,3-diphenylpropyl methacrylate, N,N-dimethylacrylamide, methyl methacrylate, 2-(1-naphthylethyl) methacrylate, glycol methacrylate, 3-phenylpropyl acrylate and 2-(2-naphthylethyl) methacrylate.

- 8. A method of producing the polymeric compositions of claim 4 wherein said one or more hydrophilic monomers is selected from the group consisting of N,N-dimethylacrylamide and methyl methacrylate.
- 9. A method of producing the polymeric compositions of claim 5 wherein said one or more hydrophobic monomers is selected from the group consisting of 2-ethylhexyl methacrylate, 3methacryloyloxypropyldiphenylmethylsilane and 2-phenyloxyethyl methacrylate.
- 10. A method of producing ophthalmic devices from the polymeric compositions of claim 2, 3, 4 or 5 comprising:
   casting one or more polymeric compositions in the form of a rod;
   lathing or machining said rod into disks; and
   lathing or machining said disks into ophthalmic devices.

- 11. A method of producing ophthalmic devices from the polymeric compositions of claim 2, 3, 4 or 5 comprising: pouring one or more polymeric compositions into a mold prior to curing; curing said one or more polymeric compositions; and removing said one or more polymeric compositions form said mold following curing thereof.
- 12. A method of using ophthalmic devices of claim 10 or 11 comprising: making an incision in the cornea of an eye; and implanting said ophthalmic device within the eye.
- 13. The method of claim 10, 11 or 12 wherein said ophthalmic device is an intraocular lens or a corneal inlay.
- 14. The method of claim 10 or 11 wherein said ophthalmic device is a contact lens.
- 15. A polymeric composition produced through the polymerization of one or more monomers of claim 1 with one or more strengthening agents.

- 16. A polymeric composition produced through the copolymerization of one or more monomers of claim 1 with one or more aromatic or non-aromatic non-siloxy-based monomers and one or more strengthening agents.
- 17. A polymeric composition produced through the copolymerization of one or more monomers of claim 1 with one or more hydrophilic monomers and one or more strengthening agents.
- 18. A polymeric composition produced through the copolymerization of one or more monomers of claim 1 with one or more hydrophobic monomers and one or more strengthening agents.
- 19. The polymeric composition of claim 15, 16, 17 or 18 wherein said one or more strenghthening agents are selected from the group consisting of cycloalkyl acrylates and methacrylates.
- 20. A polymeric composition produced through the polymerization of one or more monomers of claim 1 with one or more crosslinking agents.

- 21. A polymeric composition produced through the copolymerization of one or more monomers of claim 1 with one or more aromatic or non-aromatic non-siloxy-based monomers and one or more crosslinking agents.
- 22. A polymeric composition produced through the copolymerization of one or more monomers of claim 1 with one or more hydrophilic monomers and one or more crosslinking agents.
- 23. A polymeric composition produced through the copolymerization of one or more monomers of claim 1 with one or more hydrophobic monomers and one or more crosslinking agents.
- 24. The polymeric composition of claim 20, 21, 22 or 23 wherein said one or more crosslinking agents are selected from the group consisting of diacrylates and dimethacrylates of triethylene glycol, butylene glycol, neopentyl glycol, hexane-1,6-diol, thio-diethylene glycol and ethylene glycol, trimethylolpropane triacrylate, N,N'-dihydroxyethylene bisacrylamide, diallyl phthalate, triallyl cyanurate, divinylbenzene; ethylene glycol divinyl ether, N,N-methylene-bis-(meth)acrylamide, sulfonated divinylbenzene and divinylsulfone.